The Development and Psychometric Evaluation of the Brief Resilient Coping Scale

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This article introduces the Brief Resilient Coping Scale (BRCS), a 4-item measure designed to capture tendencies to cope with stress in a highly adaptive manner. Two samples of individuals with rheumatoid arthritis (ns = 90 and 140) provide evidence for the reliability and validity of the BRCS. The BRCS has adequate internal consistency and test-retest reliability. Convergent validity of the scale is demonstrated by predictable correlations with measures of personal coping resources (e.g., optimism, helplessness, self-efficacy), pain coping behaviors, and psychological well-being. Resilient coping, as assessed by the BRCS, also buffers the effects of high levels of arthritis-related and non-arthritis-related stressors on depressive symptoms. The sensitivity of the BRCS to changes associated with a cognitive-behavioral intervention is also demonstrated. The BCRS may be useful for identifying individuals in need of interventions designed to enhance resilient coping skills.

Keywords: resilience; coping; stress reactions; rating scales; rheumatoid arthritis

Resilience is a complex phenomenon that refers to the ability to rebound from and positively adapt to significant stressors (Dyer & McGuinness, 1996). According to Webster's dictionary (Mish, 1996, p. 996), resilience is "an ability to recover from or adjust easily to misfortune or change." O'Leary and Ickovics (1995) note that some resilient individuals actually thrive after successfully dealing with stressful challenges, extracting positive changes from the experience and surpassing former levels of growth and functioning. After decades of correlational research dedicated to identifying individual and environmental protective factors promoting resilient behavior, the current research focus has shifted to the protective process of resilient coping (Luthar, Cicchetti, & Becker, 2000; Richardson, 2002). This focus is reflected in a recent definition of resilience as "a dynamic process encompassing positive adaptation within the context of significant adversity" (Luthar et al., 2000, p. 543).

Knowledge about the resilient coping process is of great interest to researchers because this process is associated with a variety of positive psychological and physical outcomes (Benard, 1999; Hechtman, 1991). Researchers interested in adaptive coping need an efficient instrument that measures this construct. The purpose of this article is to present the validity and reliability data for the Brief Resilient Coping Scale (BRCS) using two samples of individuals with rheumatoid arthritis. Rheumatoid arthritis (RA) is an autoimmune condition often accompanied by high levels of pain, fatigue, and functional disability (Pincus, 1996). Because of the chronic disease-related stressors associated with RA, this patient population can provide helpful information about resilient patterns of adapting to stress. There is great individual variability in how well individuals with RA adjust to the condition, and this adaptation pattern varies even when controlling for the amount of pain and disability reported (Newman & Revenson, 1993). Highly resilient individuals should generally be able to cope with RA-related stressors such as pain, fatigue, and functional limitations without depression or psychological breakdown.

REVIEW OF LITERATURE

Although there is some consensus in the literature about the nature of protective factors correlated with resilience, far less is known about the nature of the resilient coping process itself (Jacelon, 1997). Lazarus and Folkman (1984) define coping as cognitive and behavioral efforts used to manage external or internal demands appraised as taxing or exceeding an individual's resources. The construct of resilient coping adds the critical conditions of significant threat and the outcome of positive adaptation to this generic coping definition (Luthar et al., 2000). The distinguishing feature of resilient coping is its ability to promote positive adaptation despite high stress.

Conceptual Framework

Although resilience has been described in the literature as both a cluster of personality traits and a complex, adaptive coping process (Jacelon, 1997; Kumpfer, 1999), the personality traits and environmental protective factors theoretically provide a substrate for the development and refinement of the adaptive coping process. Rutter (1987) proposes that the relatively stable set of personality traits associated with resilience reduces the probability of negative chain reactions to stressful events and maximizes the probability of effective coping and adaptation. Resilient traits, therefore, promote the use of adaptive cognitive and behavioral coping processes in the face of adversity. Repeated successful engagements with stressors then reinforce the resilient traits and make the use of adaptive, resilient coping more likely in the future (Woodgate, 1999a).

Polk (1997) identifies 26 clusters of phenomena in the literature related to resilience and groups these clusters into four classifications: dispositional patterns, relational patterns, philosophical patterns, and situational patterns. The dispositional pattern refers to personal attributes noted in the literature that serve as protective factors, including both physical and psychosocial attributes such as intelligence, self-esteem, self-confidence, and self-efficacy. The relational pattern in her framework incorporates social skills that elicit social support and commitment to social roles interpersonally and in the community. Polk also identifies a philosophical pattern that incorporates attributes identified in the resilience literature, including personal beliefs that promote a sense of meaning and purpose and a balanced perspective of life. Finally, the situational pattern in this model of resilience corresponds to resilient coping patterns, the construct of interest for our scale development purposes. Polk states that the situational pattern "discloses resilience as a characteristic approach to situations or stressors and is manifested as cognitive skills,

problem-solving ability, and attributes that indicate a capacity for action in facing a situation" (p. 6). The situational pattern also incorporates realistic goal-setting skills, an ability to assess consequences of actions, and active problem-solving behavior enhanced by flexibility, perseverance, and resourcefulness.

Using Polk's (1997) model, resilient coping behavior refers to a tendency to effectively use cognitive appraisal skills in a flexible, committed approach to active problem solving despite stressful circumstances. The use of resilient coping tends to promote positive adaptation in the face of adversity and involves reliance on the dispositional resources identified in Polk's model. Furthermore, the use of Polk's dispositional and situational patterns is mutually reinforcing. For instance, effective coping experiences enhance the dispositional traits of self-efficacy, optimism, and self-reliance, and these traits, in turn, reinforce a willingness to attempt to actively solve other problems (Kumpfer, 1999). Possession of creative, adaptive problem-solving abilities (i.e., resilient coping) may, therefore, be a salient indicator of the additional possession of a wide variety of dispositional resilience characteristics.

Previous Studies

The vast majority of resilience inquiry to date focuses on identifying personality characteristics associated with adaptive coping—characteristics that merit discussion. Targeted samples of adults who have coped well with chronic illness include long-term survivors of AIDS (Rabkin, Remien, Katoff, & Williams, 1993) and participants at risk for cervical carcinoma (Antoni & Goodkin, 1988). Personal characteristics associated with resilience in these studies include optimism, an active or adaptable coping style, and the ability to elicit social support (Antoni & Goodkin, 1988; Rabkin et al., 1993). In addition, Rabkin et al. (1993) mention higher levels of intelligence and education, wide-ranging interests, and an ability to articulate future goals as attributes of resilient individuals in their sample. The optimistic and active problem-solving style, goal orientation, and flexible coping identified in these studies correspond to Polk's (1997) situational patterns, which we conceptualize as resilient coping patterns.

The majority of research studies related to resilience investigate children and adolescents who have experienced significant adversity. These studies identify personal attributes and environmental variables serving as protective factors, generally assessing three clusters of characteristics—personal predispositions, family characteristics, and the impact of peers (Cowen & Work, 1988; Luthar & Zigler, 1991). Congruent findings from studies of resilience in children and adolescents include competent cognitive skills that enable a child to think independ-

ently and creatively address problems, reflective capabilities that promote independent and novel approaches to problems (evidenced in reframing), and an ability to elicit positive support from others (Beardslee & Podorefsky, 1988; Fonagy, Steele, Steele, Higgitt, & Target, 1994; Garmezy, 1993; Hechtman, 1991; Werner & Smith, 1982; Woodgate, 1999b). The competent cognitive skills and reflective capabilities identified in these samples may promote the use of the resilient coping pattern of creative problem solving. In general, child and adolescent studies focus on protective factors that encourage the development of resilient traits over time despite significant adversity (Kaplan, 1999), whereas this study focuses on resilient coping behaviors in adults dealing with current stressors.

Available Measures

The literature offers few scales related to resilience measurement, and none of the published scales focuses on resilient coping in adults. Jew, Green, and Kroger (1999) developed a 35-item Resiliency Scale for adolescents that is based on 12 skills and abilities identified by Mrazek and Mrazek (1987) as factors contributing to less vulnerability to stress in children. Their 35-item Resiliency Scale has three subscales related to future orientation, active skill acquisition, and independence/risk taking, with many items that are related to specific adolescent issues, such as seeking help from teachers. A 45-item Dispositional Resilience Scale published by Bartone, Ursano, Wright, and Ingraham (1989) was developed to refine measurement of the personality style of hardiness, a construct composed of commitment, control, and challenge dimensions (Kobasa, 1979). Wagnild and Young (1993) developed a 25-item Resilience Scale based on five aspects of resilience that were identified in their qualitative study of elderly women who had successfully coped with loss (Wagnild & Young, 1990). The five attributes of resilience guiding the development of this scale—perseverance, self-reliance, meaningfulness, existential aloneness, and equanimity—correspond more closely to Polk's (1997) dispositional and philosophical patterns of resilience than to her situational patterns.

METHODS

Samples

The items used to develop the BRCS were administered to two samples of individuals with RA. Ninety women with RA who were enrolled in a cognitive-behavioral intervention program (hereafter referred to as Sample 1) completed the items as part of a baseline assessment ques-

tionnaire that was administered twice, 6 weeks apart. They also completed these items at the end of the intervention program and at a 3-month follow-up. The mean age for Sample 1 was 46 years old ($SD = 11.8$), and the average length of time since diagnosis was 10.35 years ($SD = 8.79$). The items in the BRCS were also completed by 140 men and women with RA (73% women) who were participating in a longitudinal measurement study of adaptation to RA (hereafter referred to as Sample 2). The items were administered to this sample only once, during the third wave of data collection. The mean age in Sample 2 was 57.8 years old ($SD = 13.35$), and the average length of time since diagnosis was 5.25 years ($SD = 1.25$). In addition to marked differences in gender—Sample 1 only included women, $\chi^2(1) = 29.26$; $p < .001$— there were significant differences between our two samples with respect to age, $t(228) = 6.83$; $p < .001$, and length of time since diagnosis, $t(91.32) = .5.47$; $p < .001$.

Scale Development

In the initial phase of instrument development, the first author wrote a set of items related to beliefs that could theoretically be affected by a cognitive-behavioral intervention designed to enhance adaptive coping and a sense of control over stressful conditions. The questions were designed to measure resilient coping and the effective use of social support-related constructs that were addressed in the intervention. The details of that intervention have been described elsewhere (Sinclair, Wallston, Dwyer, Blackburn, & Fuchs, 1998). With the assistance of six doctoral nursing students in a research methods course, nine items were selected for further analysis to determine whether they constituted a unidimensional measure of coping. The directions for the items were worded as follows: "Consider how well the following statements describe your behavior and actions on a scale from 1 to 5, where 1 means the statement does not describe you at all and 5 means it describes you very well."

The data on these nine items completed by both sets of participants were combined into a single data set and were subjected to exploratory principal components factor analyses with orthogonal rotation to determine whether one or more factors emerged. The Scree test indicated that there were two factors (see Table 1 for a listing of the items with their loadings on the two principal components). As demonstrated in Table 1, four of the nine items loaded cleanly on the first component, three of the items loaded on the second component, one item loaded on both, and one item loaded on neither. The four items that loaded cleanly on the first component were deemed to fit the authors' conceptualization of the construct of resilient coping. Subsequently, these four items became the BRCS.

TABLE 1
Results of Principal Components Analysis With Varimax Rotation

Item Wording	Loadings[a]	
	Component 1	Component 2
1. I actively look for ways to replace the losses I encounter in life.[b]	.685	−.112
2. I believe that I can grow in positive ways by dealing with difficult situations.[b]	.679	−.200
3. I look for creative ways to alter difficult situations.[b]	.652	−.130
4. Regardless of what happens to me, I believe I can control my reaction to it.[b]	.623	−.137
5. I only set goals which I know I can reach without the help of others.	.494	.481
6. When I need help, I don't hesitate to ask a friend to help.	.239	−.756
7. I hesitate to ask others to help me.	.039	.846
8. My friends and family frequently don't live up to my expectations of how they should act.	−.173	.414
9. I really resent anyone telling me what to do.	−.116	.174
Eigenvalues	2.359	1.540
Percentage of Variance	26.209	17.116

a. Loadings are from the rotated component matrix.
b. Items that are on the Brief Resilient Coping Scale (BRCS).

Psychometric Testing

After assessing the internal consistency and stability of the BRCS, construct validity was investigated by correlating BRCS scores with measures of personal coping resources, pain coping behavior, and psychological well-being in both samples. The researchers hypothesized that the BRCS would correlate positively with personal coping resources (e.g., self-efficacy), adaptive pain coping behaviors, and positive indicators of psychological well-being. Conversely, the BCRS should be negatively correlated with helplessness, psychological vulnerability, maladaptive pain coping behaviors, and negative mood. The measures of personal coping resources were the arthritis helplessness subscale of the Arthritis Helplessness Index (Stein, Wallston, & Nicassio, 1988), the Perceived Health Competence Scale (M.S. Smith, Wallston, & Smith, 1995), the Arthritis Self-Efficacy Scales (Lorig, Chastain, Ung, Shoor, & Holman, 1989), the Life Orientation Test (LOT)—a measure of dispositional optimism (Scheier & Carver, 1985), and the Psychological Vulnerability Scale (Sinclair & Wallston, 1999). In Sample 2, pain coping behavior was assessed by the Vanderbilt Multidimensional Pain Coping Inventory (VMPCI) (C. A. Smith, Wallston, Dwyer, & Dowdy, 1997). A shortened version of the VMPCI was administered to participants in Sample 1. Psychological well-being was assessed by the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988), the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), and, for Sample 2 only, the Center for Epidemiological Studies–Depression scale (CES-D) (Radloff, 1977). The reliability and validity of all these measures have been established in the literature and in studies of patients with RA (Sinclair et al., 1998; C. A. Smith & Wallston, 1992; C. A. Smith, Wallston, & Dwyer, 1995). For both samples, self-report instruments were returned by mail to research assistants who then entered the data. Data were checked for accuracy by another research assistant.

RESULTS

Reliability Testing

Separate item analyses were conducted in both samples and in the combined sample for the purposes of establishing the internal consistency of the scale and to determine whether all four of the items contributed to Cronbach's alpha. Table 2 lists item means, standard deviations, and corrected item-total correlations for both samples. Combining the two samples, the mean BRCS score was 14.81 ($SD = 2.95$). With a theoretical range from 4 to 20, 30.5% (low-resilient copers) scored 13 or less, and 27.1% (high-resilient copers) scored 17 or more.

Internal consistency. Cronbach's alpha reliability for the 4-item BRCS was computed for each time it was administered to Sample 1. The alphas were .64 (first baseline), .76 (second baseline), .69 (end of program), and .71 (3-month follow-up). The BRCS was administered only once to Sample 2, and the alpha for that sample was .68. The alpha for the combined (pooled) sample was .69.

Stability. To assess test-retest reliability, Sample 1 BRCS scores collected 6 weeks prior to the intervention were correlated with BRCS scores collected during the week prior to the intervention. The test-retest correlation of the BRCS over this 5- to 6-week baseline period was .71 ($n = 87$; $p < .001$). Stability was also assessed by correlating the postintervention BRCS scores with the BRCS scores obtained 3 months later at the follow-up. That correlation was .68 ($n = 83$; $p < .001$).

TABLE 2
BRCS Item Wording, Means, Standard Deviations,
Item-Total Correlations, and Cronbach's Alpha if Item is Deleted

Item Wording	M		SD		Corrected Item— Total Correlation		Alpha If Item Deleted	
	S1	S2	S1	S2	S1	S2	S1	S2
I look for creative ways to alter difficult situations.	4.15	3.73	0.91	1.10	.45	.49	.70	.61
Regardless of what happens to me, I believe I can control my reaction to it.	3.57	3.50	0.93	1.02	.46	.40	.70	.66
I believe I can grow in positive ways by dealing with difficult situations.	4.14	3.88	0.88	0.84	.55	.50	.65	.61
I actively look for ways to replace the losses I encounter in life.	3.69	3.45	1.01	1.08	.61	.49	.61	.60

NOTE: BRCS = Brief Resilient Coping Scale; S1 = Sample 1; S2 = Sample 2.

TABLE 3
Correlations of BRCS With Measures of Personal Coping Resources, Pain Coping Behaviors, and Psychological Well-Being

	Sample 1	Sample 2
Personal coping resources		
Helplessness	−.32*	−.32**
Psychological vulnerability	−.26*	−.17*
Dispositional optimism	.50**	.41***
Perceived health competence	.39**	.39**
Self-efficacy—pain	.48**	.18*
Self-efficacy—arthritis symptoms	.37**	.30***
Pain coping behaviors		
Reappraisal	.60**.	.56***
Active problem solving	.57**	.40***
Seeking social support	.24*	.23**
Acceptance	.36**	ns
Catastrophizing	−.38**	−.41***
Venting	−.22*	−.25**
Psychological well-being		
Positive affect	.50**	.47***
Negative affect	−.28**	−.30***
Life satisfaction	.25*	.24**
CES-D	NA	−.30***

NOTE: BRCS = Brief Resilient Coping Scale. CES-D = Center for Epidemiological Studies-Depression scale. NA = not available.
*p < .05. **p < .01. ***p < .001.

Initial Validity Testing

Bivariate analyses revealed a consistent pattern in both samples of theoretically predictable correlations between BRCS scores and measures of personal coping resources, pain coping behaviors, and psychological well-being (see Table 3). The correlations in these tables indicate that individuals with high scores on the BRCS also reported higher levels of positive personal coping resources (e.g., optimism and self-efficacy), adaptive pain coping behaviors (e.g., reappraisal and active problem solving), and psychological well-being (e.g., positive affect and life satisfaction). In contrast, individuals registering high in resilient coping reported lower levels of maladaptive personal cop-

ing resources (e.g., helplessness) and pain coping behaviors (e.g., catastrophizing or "expecting the worst") and less negative affect or depressed mood.

The preintervention BRCS scores from Sample 1 did not correlate with chronological age, employment status, or length of time since diagnosis. However, the BRCS did correlate significantly and positively with educational level in Sample 1 ($r = .37; p < .01$). The BRCS did not correlate significantly with any of the measures of disease symptomatology (e.g., pain and fatigue) in either sample.

Additional Validity Testing

Predictive validity. As further demonstration of the validity of the BRCS, we theorized, using Lazarus and Folkman's (1984) stress and coping model, that resilient coping behavior would affect psychological and/or physical outcomes. We were interested in whether the intervention used with Sample 1, designed to enhance resilient coping, resulted in improvements in psychological and physical well-being. We therefore created an Outcomes Index composed of six standardized variables reflecting postintervention scores from the following six measures of psychological and physical well-being: the Life Satisfaction Scale (Diener et al., 1985), the positive and negative affect subscales of the PANAS (Watson et al., 1988), a shortened version of Tack's (1990) fatigue scale, the pain subscale from the Arthritis Impact Measurement Scales (AIMS) (Meenan, Gertman, & Mason, 1980), and the global well-being visual analog scale (also from the AIMS). An item analysis of these measures revealed adequate alpha reliability (.86) for the six measures comprising the Outcomes Index. Regression analysis was then used to assess the effect of the preintervention BRCS scores on postintervention outcomes. We found that averaged preintervention BRCS scores were a significant predictor of postintervention outcomes as measured by the Outcomes Index ($b = 2.35; p < .03$).

Sensitivity to change. Although resilient coping may be a relatively stable pattern, the participants in Sample 1

FIGURE 1
Interaction of Resilient Coping and RA-Related Stress (Past Month's Pain Intensity) on Depressive Symptomatology

NOTE: RA = Rheumatoid Arthritis.

FIGURE 2
Interaction of Resilient Coping and Non-RA-Related Stress on Depressive Symptomatology
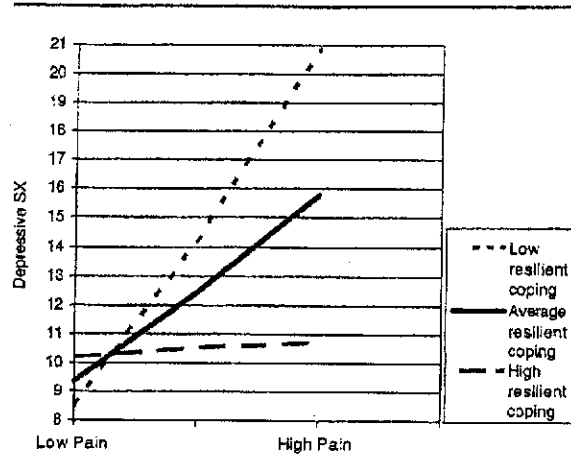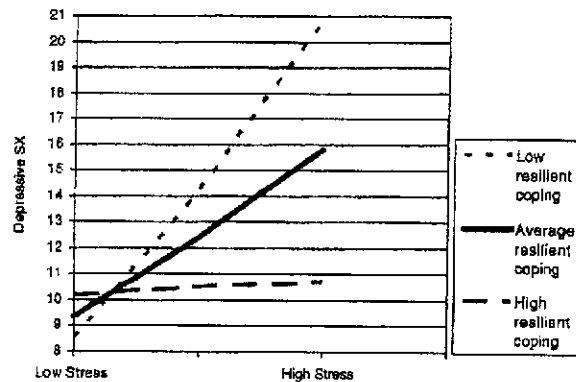

NOTE: RA = Rheumatoid Arthritis.

were involved in a cognitive-behavioral intervention that included content designed to have an impact on resilient coping. If the BRCS is sensitive to changes in cognitive and behavioral resilient coping patterns and the intervention affected those patterns, there should be changes in BRCS scores after the intervention. The mean BRCS scores for the two preintervention assessments were 10.7 and 10.8, respectively. Immediately after the intervention, the mean BRCS score was 11.1, and at the 3-month follow-up, it was 11.6. A repeated measures ANOVA revealed a significant linear effect across the four assessment periods ($F = 7.78$; $df = 1, 81$; $p < .01$). As a follow-up, paired t tests showed a significant increase in mean averaged BRCS scores from before the intervention to after the intervention ($t = 2.12$; $df = 89$; $p < .05$).

Interaction effects. As a final test of the construct validity of the BRCS, we hypothesized that resilient coping would act as a buffer against the harmful psychological effects of disease-related and non-disease-related stressors. Specifically, we believed that resilient coping would be most protective against psychological distress in situations when the individual was under a greater amount of stress. To test this interaction hypothesis, we chose as a dependent variable scores on the CES-D scale (Radloff, 1977). Pain intensity in the past month, as assessed by a visual analogue scale from the AIMS (Meenan et al., 1980), was selected as the arthritis-related stressor. Participants' responses to another visual analogue item—"How much stress have you been under in the past 6 months not related to arthritis?"—were used as the non-disease-related mea-

sure of stress. In separate regression analyses, CES-D scores were regressed on the main effects of BRCS, the stressor, and their interaction. With past month pain intensity as the stressor, the interaction term was significant, $\beta = -.19$; $t(121) = -2.23$; $p < .03$. As can be seen in Figure 1, with lower amounts of pain intensity, BRCS scores were not related to the reported degree of depressive symptomatology. As pain intensity increases, lesser amounts of resilient coping were associated with higher CES-D scores, whereas the regression line for those with BRCS scores one standard deviation above the mean was almost flat. The exact same pattern emerges when non-arthritis-related stress was examined, $\beta = -.26$; $t(121) = -3.12$; $p < .01$) (see Figure 2).

DISCUSSION

The BRCS is a brief scale that captures an important aspect of a dynamic and complex process. Several themes emerge from the items in the BRCS: tenacity, optimism, creativity, an aggressive approach to problem solving, and a commitment to extract positive growth from difficult situations. Individuals who endorse these four items would be expected to be goal directed, believe in their ability to address adverse circumstances, and usually succeed at their selected challenges. The items in this measure describe an effective, active problem-solving coping pattern that reflects the resilient coping patterns discussed in the literature, specifically the attributes described by Polk (1997) as situational patterns associated with resilience.

Rutter (1990) states that the ability to reduce the risk impact in a stressful situation is a major protective mecha-

nism for the effects of stressful circumstances. Reduction of risk impact is frequently accomplished by altering the appraisal of the risk factor and its ability to cause severe damage. Individuals who score high on the BRCS are endorsing a tendency to reframe the potency of stressors by affirming control of positive ways to offset potential losses. Using Lazarus and Folkman's (1984) terminology, they would mitigate their primary appraisal of the potency of the stressor and enhance secondary appraisals of their ability to deal with ensuing losses.

The BRCS meets the minimal standard (~ .70) for reliability of a research instrument. The brevity of this 4-item scale is a double-edged sword, making the scale convenient to administer although it may affect its internal consistency. Nonetheless, the BRCS has sufficient internal consistency and stability for a 4-item scale (Shelley, 1984). Because of its brevity, it could easily be administered multiple times in a longitudinal study.

The validity testing demonstrated that BRCS scores correlated in theoretically predictable directions with scores from a variety of personal coping resources, pain coping behaviors, and psychological well-being. These findings were consistent with findings published in studies evaluating correlates of resilience (Jacelon, 1997; Kaplan, 1999). BRCS scores were not correlated with measures of physical well-being, but our entire study population had a chronic, progressive illness that involves considerable amounts of pain and fatigue. BRCS scores were positively correlated with education level, a finding consistent with the resilience literature (Rabkin et al., 1993). The BRCS scores were predictive of outcomes associated with our cognitive-behavioral intervention. This finding indicates that the BRCS measures a coping resource that influenced psychological and physical outcomes, adding to the evidence of the validity of the BRCS as a measure of an adaptive coping resource. Furthermore, we demonstrated that BRCS scores were sensitive enough to serve as an outcome measure for a psychological intervention.

The literature indicates that resilient coping should buffer the effects of stressors on psychological outcomes (Kaplan, 1999; Luthar & Cushing, 1999). According to Roosa (2000, p. 567), "interactions are the heart of the resilience construct," and this scale's ability to interact with the effect of stressors on psychological outcomes is a salient finding. For Sample 2, the only sample that completed the CES-D, we demonstrated that BRCS scores interacted with stress to affect scores on depressive symptomatology. This finding was substantiated for both RA-related stress (past month's pain intensity) and non-RA-related stress, suggesting that the buffering effect of resilient coping reflected in the BRCS works in a similar manner for a variety of stressors. Individuals with higher

BRCS scores had significantly lower CES-D scores under high stress than individuals with low BRCS scores.

The BRCS appears to be a valid instrument, although we acknowledge that more validity testing needs to be conducted. This article presents initial evidence for the construct and criterion validity of the BRCS from two samples of people with RA. The diversity of the two samples, with significant differences related to gender, age, and length of time since diagnosis, enhances the potential generalizability of these findings to RA populations. Further research is warranted in other populations with chronic illness. In addition, studies are needed to examine the usefulness of the BRCS as a predictor of psychological breakdown and depression in healthy populations.

Resilience is an attribute with considerable intuitive appeal because it lessens a person's vulnerability to the vicissitudes of life. Information about resilient coping could prove useful to both physical and mental health care providers as they attempt to help patients cope effectively with stressful situations and conditions. The BRCS may be useful for identifying individuals in need of interventions designed to build resilient coping skills. If resilient coping can be reinforced, patients may be more likely to withstand stress without psychological breakdown. The BRCS may also be useful to investigators seeking to understand how resilient coping processes operate to protect individuals from the effects of stress. Adaptive coping processes, in general, are a prime research target for health care researchers seeking to manage patient populations more effectively and efficiently.

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